

Work Order ID 59934 - 1

Thursday, June 17, 2010 12:56:44 PM

SPLIT



Page 1

Item ID: D2962-150

Accept



Setup

Start



Revision ID:

Item Name: 3.540 Outer Tube, Extrud

Stop



Start Date: 6/17/2010

Start Qty: 40.00

70 CL 10/6/21

Required Date: 6/24/2010

Req'd Qty: 40.00

28



Cust Item ID:

Customer:

Reference:

Approvals:

Process Plan:

11

Date: 10-6-17

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D2962

Rev A

100

0.00



PURCHASING

Purchasing

Memo

0.00

Purchasing

Issue P/O: 12127 ☐ a) Extrude as per Dwg D2962 ☐ b) Material: 6061-T6 (QQ-A-200/8) ☐ c) Minimum yield tensile strength = 35 ksi ☐ d) Minimum ultimate tensile strength = 40 ksi ☐ e) Minimum elongation = 8% ☐ f) Order at 125" long ☐ g) Bon L. Canada Inc. tool #

CL 10/6/21 (70)

110

0.00



Receive & Inspect for Damage & Mat'l Certs

Packaging

Memo

0.00

Packaging

Ensure material certification is attached

CL 10/7/21 (28)

120

0.00



QC6- Inspect dimensions to drawing

QC

Memo

0.00

Quality Control

Check Pull test per Dwg D2962 for compliance page attached. Check hardness with Webster tester

10/7/21
S. H. H. 10/7/21

CL 10/7/21 (28)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 59934

Thursday, June 17, 2010 12:56:44 PM



Page 2

Item ID: D2962-150

Revision ID:

Accept



Item Name: 3.540 Outer Tube, Extrud

Setup Start



Start Date: 6/17/2010 Start Qty: 40.00

Stop



Required Date: 6/24/2010 Req'd Qty: 40.00

Cust Item ID:

Customer:

Reference:



Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start



QC:

Date:

SPC (Y/N):

Date:

Stop



Sequence ID/
Work Center ID

Operation
Description

RACK IN FRONT
OF STORES

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

130



Packaging

Packaging

Identify as per dwg & Stock Location:

Memo

0.00

0.00

28

ZE 10/08/03

140



QC

Quality Control

QC21 - Final Inspection - Work Order Release

Memo

0.00

0.00

10/08/04

MF 10-8-04

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Thursday, June 17, 2010 12:56:48 PM

Page 1

Work Order ID: 59934

Parent Item: D2962-150

Parent Item Name: 3.540 Outer Tube, Extrut



Start Date: 6/17/2010

Required Date: 6/24/2010

Start Qty: 40.00

Required Qty: 40.00

Comments: IPP Rev:A New Issue 06-06-20 JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D2962-150P 3.540 Outer Tube, Extrut		Purchased	No			110	Each	0.0000	1	40			



CC/PS (28)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

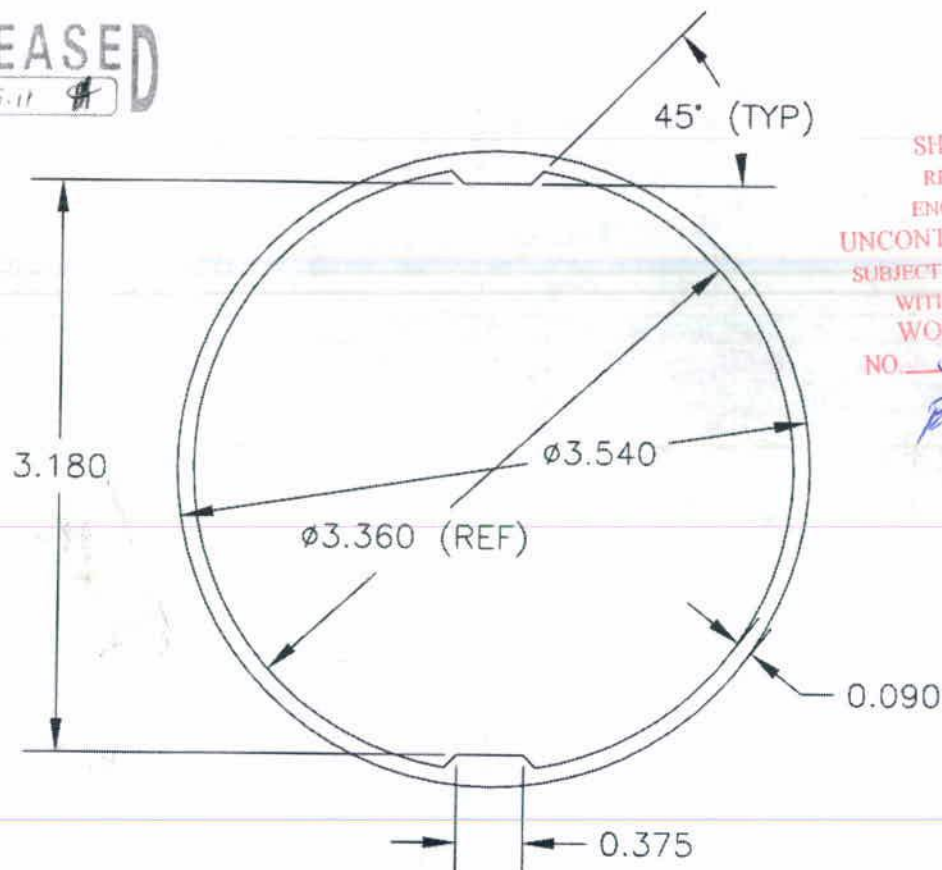
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN RF	DRAWN BY RF	DART AEROSPACE USA, INC. BELLEVUE, WA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2962	REV. A SHEET 1 OF 1
DATE 00.03.10		TITLE EXTRUSION	SCALE 1:1
A	00.03.10	NEW ISSUE	

RELEASED
00.05.11 *[Signature]*

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 59934
2810-6-17

GENERAL NOTES

1. MANUFACTURED USING BON L CANADA DIE # TBD- DAA-897127 *[Stamp: 00.06.08]*
 2. ORDER AS D2962-XXX WHERE XXX = LENGTH IN INCHES
EG. 125 LONG: D2962-125
 3. MATERIAL: 6061-T6 (QQ-A-200/8) ✓
MINIMUM YIELD TENSILE STRENGTH = 35 ksi
MINIMUM ULTIMATE TENSILE STRENGTH = 40 ksi
MINIMUM ELONGATION = 8 %
- A SAMPLE FROM EACH BATCH WILL BE PULL TESTED TO ASTM STANDARD B221 BY AN APPROVED TESTING FACILITY TO ENSURE THAT THE BATCH MEETS THE ABOVE MINIMUM MECHANICAL PROPERTIES.
4. BREAK ALL UNMARKED SHARP CORNERS 0.016-0.025
 5. NO TOOLING MARKS.
 6. TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.
 7. ALL DIMENSIONS ARE IN INCHES.

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W/O:			WORK ORDER CHANGES					
DATE	STEP		PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:			WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP		Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
				Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries



ACCT# 00046024

SHIP TO
DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY ON
K6A 1K7 CNSOLD TO / PURCHASER
DART AEROSPACE LTD.
1270 ABERDEEN ST.
HAWKESBURY ON
K6A 1K7 CN

PHONE 613-632-5200

PHONE 613-632-5200

INVOICING COMPANY AND LOCATION

SIGNATURE ALUMINUM CANADA
1850 CLEMENTS ROAD
PICKERING ON L1W 3R8

TERMS / FREIGHT

O / P

REFER TO
THESE NUMBERS ON
ALL CORRESPONDENCE

MANIFEST DATE

07-28-10

MANIFEST NUMBER

682087

SALES ORDER NUMBER

64085

CREDIT REP

DHILLON, ROBE

SALES REP

LOCATION

PIC

TRAILER NUMBER

JODEE

SALESMAN

59358

FIELD SALES REP

Bates M
905-427-2235

CUST SERVICE REP

Burton D
905-427-2227CUSTOMER ID
46024ORDER DATE
06/21/10CUSTOMER PO NUMBER
12127

JOB

BILL OF LADING NUMBER
08409451

ITEM NO.	ORIGINAL ORDER QUANTITY	UNIT	PREVIOUS SHIPPED QUANTITY	MFG. PART NUMBER	ALLOY & TEMPER	FINISH DESCRIPTION	THIS SHIPMENT			UNIT	QUANTITY DUE
				CUSTOMER PART NUMBER	LENGTH CUTTING TOLERANCE	FABRICATION DESCRIPTION SHIPPING TOLERANCE	NBR OF PKGS	GROSS POUNDS	NET QUANTITY		
01	1105	LB	0	DAA-3-2	6061 /T6	MILL	1	456	439	LB	666
	875	FT	0	D2962150	150"	CERTIFICATE OF COMP			350.00	FT	525
	70	PC	0		+5/16 " -0 "	(+015-015,0080-0059)			<u>28</u>	PC	<u>42</u>
LOT/TKT DETAIL:						64085010 / 365118	1	456	439		28 PC
02	666	LB	0	DAA-897121-3	6061 /T6	MILL	1	747	723	LB	0
	665	FT	0	D2600-1-190	190"	CERTIFICATE OF COMP			759.99	FT	0
	42	PC	0		+5/16 " -0 "	(+015-015,0048-0035)			<u>48</u>	PC	0
LOT/TKT DETAIL:						64085020 / 365106	1	747	723		48 PC
03	467	LB	0	DAA-897121-1	6061 /T6	MILL	1	511	492	LB	0
	467	FT	0	D2600-1-160	160"	CERTIFICATE OF COMP			519.99	FT	0
	35	PC	0		+5/16 " -0 "	(+015-015,0040-0029)			<u>39</u>	PC	0
LOT/TKT DETAIL:						64085030 / 365107	1	511	492		39 PC
							3	1714	1654	LB	
									1629.98	FT	
									115	PC	
							TOTALS				

Transportation/Traffic damages and/or shortage claims are to be noted on the delivery copy of sellers shipping manifests and signed and dated below by customers authorized representatives.

No return materials will be accepted for credit without permission. The articles and/or services covered by this shipping manifest were produced in accordance with the fair labor standards act of 1938 as amended. Order accepted subject to the terms and conditions stated on the reverse side.

PAGE 1

DATE OF DELIVERY

DRIVER

CERTIFICATE OF COMPLIANCE

SIGNATURE ALUMINUM CANADA

1850 CLEMENTS ROAD
PICKERING, ON L1W 3R8

Cert Date	Cert No	Sales Order	Page
07/28/10	208423	64085	1
Cust PO	B/L No	Lot	Date
12127	08409451	64085010	7/28/10

Sold To	Ship To
46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7	46024 DART AEROSPACE LTD. 1270 ABERDEEN ST. HAWKESBURY, ON K6A 1K7

Item No	Part No	Item Description	Cust Part
1.000	DAA-3-2	150" MILL 6061 T6	D2962150
Gross Weight	456 LBS		
Net Qty	439 LB	28 PC	350 FT 1 PKG
Specification	AMS-QQ-A-200/8 & ASTM B221-08		Die Desc

Mechanical Tests:		Yield	%Elongation	Conductivity	Bend/ Drift HREW
Test No.	Tensile MPA / KSI	MPA / KSI			
1	302.9 / 44.0	273.6 / 39.7	9.9	.0	91

Chemical Analysis:							
SI	FE	CU	MN	MG	CR	ZN	TI

.64	.29	.24	.05	.88	.06	.08	.01
.65	.29	.25	.05	.90	.06	.18	.01

This will certify that the material described herein has been inspected and tested in accordance with Signature Aluminum Canada's standard sampling and testing procedures or in accordance with the requirements of any specification forming a part of the material description to the extent indicated herein. Data of chemical composition for the material and test results from samples representative of the material are set forth above hereof or in any attachments hereto. This information shows that the material meets the applicable requirements. Inspection and test records are maintained on file. This certificate shall be deemed apart of and subject to the terms and conditions of warranty set forth on the reverse side of our order acknowledgment form. No other warranties are applicable.

Ryan Petersen, QA Manager Signature Aluminum Canada Inc